Application Serial No.: 10/541,947

IN THE SPECIFICATION:

Please insert the following six (6) paragraphs before the paragraph that begins on page 9, line 12, of the specification as filed.

Figures 1A-1D depict immunohistological analyses of the gonadal regions of stage 27 embryos produced by hens that had been immunized with peptides derived from the chicken VASA polypeptide. Each section is stained with an antibody that is specific for SSEA-1.

Figure 1A depicts sections from a control embryo produced by a hen that had not been immunized. Figure 1B depicts sections from an embryo produced by a hen that had been immunized with a Vasa-C peptide (SEQ ID NO: 4). Figure 1C depicts sections from a hen that had been immunized with a Vasa-N peptide (SEQ ID NO: 3). Figure 1D depicts sections from an embryo produced by a hen that had been immunized with both the Vasa-N and the Vasa-C peptide (SEQ ID NOs: 3 and 4, respectively). SSEA-1+ cells (dark stained cells) are much more abundant in the control embryo (Figure 1A) than in any of the embryos exposed to anti-VASA antibodies (Figures 1B-1D).

Figures 2A-2D depict immunohistological analyses of the gonadal regions of stage 27 embryos produced by hens that had been immunized with peptides derived from the chicken DAZL polypeptide. Each section is stained with an antibody that is specific for SSEA-1.

Figure 2A depicts sections from a control embryo produced by a hen that had not been immunized. Figure 2B depicts sections from an embryo produced by a hen that had been immunized with a DAZL-C peptide (SEQ ID NO: 8). Figure 2C depicts sections from a hen that had been immunized with a DAZL-N peptide (SEQ ID NO: 7). Figure 2D depicts sections from an embryo produced by a hen that had been immunized with both the DAZL-N and DAZL-C peptide (SEQ ID NOs: 7 and 8, respectively). SSEA-1+ cells (dark stained cells) are much more abundant in the control embryo (Figure 2A) than in any of the embryos exposed to anti-DAZL antibodies (Figures 2B-2D).

Application Serial No.: 10/541,947

Figures 3A and 3B depict immunohistological analyses of the gonadal regions of stage 27 embryos produced by hens that had been immunized with peptides derived from both the chicken Vasa and DAZL polypeptides. Each section is stained with an antibody that is specific for SSEA-1.

Figure 3A depicts sections from a control embryo produced by a hen that had not been immunized. Figure 3B depicts sections from an embryo produced by a hen that had been immunized with Vasa-N, Vasa-C, DAZL-N, and DAZL-C peptides (SEQ ID NOs: 3, 4, 7, and 8). SSEA-1+ cells (dark stained cells) are much more abundant in the control embryo (Figure 3A) than in any of the embryos exposed to both anti-DAZL and anti-VASA antibodies (Figures 3B).

Please replace the paragraph beginning on page 13, line 2, with the following rewritten paragraph.

As used herein, the terms "VASA antibody" and "anti-VASA antibody" are used interchangeably and refer to an antibody, in one embodiment an IgY antibody, which binds to an avian VASA polypeptide. VASA is an ATP-dependent RNA helicases that is a member of the DEAD-box (Asp-Glu-Ala-Asp; SEQ ID NO: 9) family. VASA and its orthologs are expressed in the germplasm of many species, including zebrafish (Danio rerio), Drosophila melanogaster, Caenorhabditis elegans, and has been identified in PGCs from other species, including Xenopus laevis, the mouse, and humans (reviewed in Raz, Nature Genetics 4:690-700, 2003). In these species, VASA and related polypeptides have been implicated in germ cell development, including pole PGC development, proliferation, and differentiation, as well as gametogenesis. Id. The nucleic acid and amino acid sequences of chicken VASA (also called CVH) can be found at GENBANK® Accession Nos. AB004836 and BAB12337, respectively.

Application Serial No.: 10/541,947

IN THE SEQUENCE LISTING:

Please replace the Sequence Listing with the Substitute Sequence Listing submitted herewith.